

CLAIMS

What is claimed is:

1. An apparatus for applying a sanitizing solution comprising:
  - 5 a container for the solution;
  - an electrolytic cell;
  - an electrical power source;
  - a control circuit for selectively applying a charge from said power source to

said cell to produce an oxidant within the cell; and

- 10 a fluid connection between said electrolytic cell and the solution within the bottle to produce a sanitizing liquid.

2. The apparatus of claim 1 wherein said electrolytic cell is sealed during oxidant production creating a gas pressure that opens said fluid connection.

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3. The apparatus of claim 1 wherein said electrolyte is a sodium chloride brine solution.

4. The apparatus of claim 1 wherein said solution in said container is an aqueous solution.

5. The apparatus of claim 1 wherein said container is a spray bottle including a sprayer head housing said electrolytic cell, electrolyte, power source, and control circuit.

6. A method of producing small quantities of a disinfectant comprising the steps  
of:

placing an aqueous solution in a container;  
placing an electrolyte in an electrolytic cell;  
5 applying an electrical charge to the cell to create an oxidant;  
introducing the oxidant into the aqueous solution to create a disinfectant; and  
applying the disinfectant to an object that is desired to be cleansed.

7. The method of claim 6 wherein said electrical charge is produced by a  
10 battery and a user-controlled circuit.

8. The method of claim 6 wherein said oxidant is introduced into said container  
by controlling the opening and closing of a fluid connection between a sealed cell and the  
container by gas pressure buildup within said cell.

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9. The method of claim 6 wherein said aqueous solution is water.

10. An apparatus to produce a disinfecting solution, said apparatus comprising:  
an electrolytic cell comprising at least two electrodes wherein at least one  
20 electrode is a cathode and another electrode is an anode;  
an electrical energy source;  
a control circuit for providing an electrical charge between said cathode and  
said anode;  
an electrolyte within said cell whereby said controlled electrical charge  
25 passing through the electrolyte solution generates at least one oxidant in the electrolyte; and

a container for a fluid to be mixed with said one oxidant.

11. The apparatus of claim 10 comprising a base unit for housing said electrolytic cell, said control circuit, said electrolyte, and said power source, said container placed on  
5 said base unit.

12. The apparatus of claim 11 comprising a fluid container penetration device for introduction of oxidants to the interior of said fluid container and further comprising a penetration needle and a sealing valve mechanism integral to said fluid container.

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13. The apparatus of claim 10 wherein said electrolyte is stored in a replaceable container.

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14. The apparatus of claim 12 comprising a system activation button and status indicator lights.

15. The apparatus of claim 14 wherein said container includes a fluid spray head and an oxidant efficacy indicator light located within said fluid container spray head.

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16. The apparatus of claim 15 wherein said oxidant efficacy indicator light is activated by electrical contacts from said base unit.

17. The apparatus of claim 16 wherein said oxidant efficacy indicator light is activated by a radio frequency signal from said base unit.

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18. The apparatus of claim 10 wherein said container includes a fluid container spray head housing said electrolytic cell, said control circuit, said electrolyte, and said power source.

5           19. The apparatus of claim 10 wherein said electrolytic cell, said control circuit, said electrolyte, and said power source are housed within an oxidant production module removably attached to said container.

10          20. The apparatus of claim 19 wherein said oxidant production module can produce one or more doses of oxidant.

21. The apparatus of claim 19 wherein said oxidant production module attaches to said fluid container by mechanical means and provides a liquid seal with said fluid container.